Long Term Sustainment of Digital Information for Science and Engineering: Putting the Pieces Together
Team Report/Recommendation Template

Breakout Team ID: Topic	Group 2: CASE STUDY (Archival Engineering Body of Knowledge, Tools Repository, Analysis of Existing Archival Systems, Engineering Data Corpus)
Identify: Problem or Issue	Tools for archival, and what exists and where (building blocks)
Analyze: Root Cause	Emerging area of interest needs consolidation, lack of vendor interest
Recommendation	Better consolidated registries, clearing house for available technologies for archival (shared cyber infrastructure), promote educational awareness
Benefit	Shared interest, one-stop shop

Plan: Action(s) to implement	Owner/Time Frame
Open source initiatives (eg. MELLON foundation) http://www.mellon.org/grant_programs/programs/copy_of_research	Bill, Susan, William, Sudarsan
Promote WIKI spaces for community of interest http://digitalpreservation.wikispaces.com/	Josh, Joe (July 2007)
Create/ Add- to online resource spaces (eg. www.dcc.ac.uk/tools), Body of Knowledge	Chris, Chris R,
Create Better consolidated registries, clearing house for available technologies for archival	Josh, Sudarsan
Test cases for Engineering Data,	Gerry (ATI),
Test cases for Archival systems and organizations	NARA, AIRBUS, NIST

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Breakout Team ID: Topic	Group 2: Granularity (Information Capture Through PLM Stages, Level/Detail of Information, Information Extraction by Reconstruction, Information Refinement)
Identify: Problem or Issue	Implications of essential characteristics (domain specific), No min Requirements
Analyze: Root Cause	Lack of Metrics, potential use cases, Service level agreements
Recommendation	Link to Usage Requirements,
Benefit	Cost/Risk analysis

Plan: Action(s) to implement	Owner/Time Frame
Identify/ characterize domain specific Information	LOTAR, Chris
Identifying Service Level Agreements	William, Sudarsan, Susan
Identify Metrics to characterize the granularity of Information	Sub, Mahesh, Sudarsan
Characterize user requirements with respect to granularity	

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Breakout Team ID: Topic	Groups 2: Standards and Architectures (Extensions to OAIS for Multimedia Doc and Environments, AIP Interoperability, Classification of AIP, Ref Architectures based on OAIS, Standards Landscape for Archival, Identification and Use of Established Standards and Best Practices)
Identify: Problem or Issue	Lack of Reference Architecture (eg. Service oriented architectures) and related use cases, requirements and scenarios, Archival digital Format,
Analyze: Root Cause	Lack of clear understanding of usage scenarios and requirements, Lack of Policies,
Recommendation	Understanding the needs of community, industry specific requirement analysis
Benefit	Reference Architectures for specific communities

Plan: Action(s) to implement	Owner/Time Frame
Identify Reference Architectures based on use cases, requirements and scenarios (Eg. LOTAR), collaborate with LOTAR	LOTAR, Bill
Identify Usage requirements (eg. Design community, construction), ontology for archival requirements	Gerry, William
Analysis of File formats based on Standards	Bill, William
Identifying Information handles/ annotations	Chris, William, Dannie
Identify a Landscape of Standards, Ontologies,	Sudarsan

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Breakout Team ID: Topic	Group 2: Design Information (Design History Capture, Standard for Extraction of Design and Manufacturing Rules from Knowledge Based Support Tools)
Identify: Problem or Issue	Inefficient methods to capture Design History and design rationale
Analyze: Root Cause	NO comprehensive methods to capture design history explicitly and even if captured they are distributed
Recommendation	Towards context sensitive digital records, identify more comprehensive digital records
Benefit	Efficient methods to capture Design History and Rationale

Plan: Action(s) to implement	Owner/Time Frame
Identify methods for meaningful and efficient extraction of information (design rationale)	NIST
Research on context sensitive digital formats	Chris, Sudarsan
Usecases : as designed, as manufactured, as maintained…	
Research on Manufacturing history, Supply chain environment, collaborative tools used	

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Breakout Team ID: Topic	Group 2: Digital Formats (Preservation of Format Registry, Merging and Differentiation Standards, Detection of Formats Obsolescence, Format Migration, Flexible Handle of Formats, Workflows, Software Version)
Identify: Problem or Issue	Diverse Digital Formats, Proliferation, Transformation between Digital Formats
Analyze: Root Cause	Business Model, Application specific Formats,
Recommendation	Interoperable Digital Format, include the cost (current and estimated) of transformation of digital format into the Total cost of ownership of the Digital Object
Benefit	Interoperability, cost effectiveness

Plan: Action(s) to implement	Owner/Time Frame
Characterization of Digital Formats –Digital Format Registries (GDFR)	NIST
Identify Business Models	NARA, NIST
If a legal deposit of Digital Format by vendors is not plausible, a mechanism to transform into a std format should be provided and maintained by a neutral body	NIST
Note: characterize Looseness in transformation, Issues related to IPRs	

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Breakout Team ID: Topic	Group 2: Data Relationship (Traceability, Information Models for Archival Systems)
Identify: Problem or Issue	
Analyze: Root Cause	
Recommendation	
Benefit	

Plan: Action(s) to implement	Owner/Time Frame

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Team Report/Recommendation Template

Breakout Team ID: Topic	Group 2: Digital Formats	
Identify: Problem or Issue		
Analyze: Root Cause		
Recommendation		
Benefit		
Plan: Action(s) to implement		Owner/Time Frame

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Breakout Team ID: Topic	Group 2: Digital Formats	
Identify: Problem or Issue		
Analyze: Root Cause		
Recommendation		
Benefit		
Plan: Action(s) to implement		Owner/Time Frame

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Breakout Team ID: Topic	Group 2: Vendor Support	
Identify: Problem or Issue		
Analyze: Root Cause		
Recommendation		
Benefit		
Plan: Action(s) to implement		Owner/Time Frame

Breakout Team Participants

Team ID: Group 2

Standards and Specific Domains

Name/Affiliation	Name/Affiliation